

## Refine Search

### Search Results -

Terms	Documents
L5 and (MegK or MegCV or MegBIII or MegCIV)	4

**Database:**

US Pre-Grant Publication Full-Text Database
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EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

**Search:**

L6	<input type="button" value="▲"/>	<input type="button" value="▼"/>	<input type="button" value="Refine Search"/>
<input type="button" value="Recall Text"/>	<input type="button" value="Clear"/>	<input type="button" value="Interrupt"/>	

### Search History

DATE: Friday, April 13, 2007 [Purge Queries](#) [Printable Copy](#) [Create Case](#)

Set Name Query

side by side

Hit Count Set Name

result set

*DB=USPT; PLUR=YES; OP=OR*

<u>L6</u>	L5 and (MegK or MegCV or MegBIII or MegCIV)	4	<u>L6</u>
<u>L5</u>	(gene cluster and Meg)	105245	<u>L5</u>
<u>L4</u>	L1 and (MegK)	1	<u>L4</u>
<u>L3</u>	L1 and MegL	0	<u>L3</u>

*DB=PGPB; PLUR=YES; OP=OR*

<u>L2</u>	L1	0	<u>L2</u>
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*DB=USPT; PLUR=YES; OP=OR*

<u>L1</u>	hutchinson.in.	1366	<u>L1</u>
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END OF SEARCH HISTORY

## Hit List

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**Search Results - Record(s) 1 through 1 of 1 returned.**

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1. Document ID: US 7189549 B2

L4: Entry 1 of 1

File: USPT

Mar 13, 2007

US-PAT-NO: 7189549

DOCUMENT-IDENTIFIER: US 7189549 B2

TITLE: Recombinant polynucleotides encoding pro-geldanamycin producing polyketide synthase and accessory proteins, and uses thereof

DATE-ISSUED: March 13, 2007

PRIOR-PUBLICATION:

DOC-ID	DATE
US 20040077058 A1	April 22, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hutchinson; Richard C.	San Mateo	CA		US
Reid; Ralph C.	San Rafael	CA		US
Hu; Zhihao	Castro Valley	CA		US
Rascher; Andreas	San Francisco	CA		US
Schirmer; Andreas	Hayward	CA		US
McDaniel; Robert	Palo Alto	CA		US

US-CL-CURRENT: 435/190; 435/193, 435/252.35, 435/320.1, 435/69.7, 536/23.2

Terms	Documents
L1 and (MegK)	1

**Display Format:**

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## Hit List

First Hit	Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACCS					

Search Results - Record(s) 1 through 4 of 4 returned.

1. Document ID: US 7189549 B2

L6: Entry 1 of 4

File: USPT

Mar 13, 2007

US-PAT-NO: 7189549

DOCUMENT-IDENTIFIER: US 7189549 B2

TITLE: Recombinant polynucleotides encoding pro-geldanamycin producing polyketide synthase and accessory proteins, and uses thereof

DATE-ISSUED: March 13, 2007

PRIOR-PUBLICATION:

DOC-ID	DATE
US 20040077058 A1	April 22, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hutchinson; Richard C.	San Mateo	CA		US
Reid; Ralph C.	San Rafael	CA		US
Hu; Zhihao	Castro Valley	CA		US
Rascher; Andreas	San Francisco	CA		US
Schirmer; Andreas	Hayward	CA		US
McDaniel; Robert	Palo Alto	CA		US

US-CL-CURRENT: 435/190; 435/193, 435/252.35, 435/320.1, 435/69.7, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMPC	Drawn D
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2. Document ID: US 7011959 B1

L6: Entry 2 of 4

File: USPT

Mar 14, 2006

US-PAT-NO: 7011959

DOCUMENT-IDENTIFIER: US 7011959 B1

TITLE: Heterologous production of polyketides

DATE-ISSUED: March 14, 2006

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
------	------	-------	----------	---------

Santi; Daniel	San Francisco	CA	US
Peck; Larry	San Carlos	CA	US
Dayem; Linda	Belmont	CA	US
Kealey; James	San Rafael	CA	US

US-CL-CURRENT: 435/76; 435/252.33

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWMC](#) | [Drawn D](#)

3. Document ID: US 6627427 B1

L6: Entry 3 of 4

File: USPT

Sep 30, 2003

US-PAT-NO: 6627427

DOCUMENT-IDENTIFIER: US 6627427 B1

TITLE: Heterologous production of 15-methyl-6-deoxyerthronolide B

DATE-ISSUED: September 30, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Katz; Leonard	Oakland	CA		
Revill; Peter	Oakland	CA		

US-CL-CURRENT: 435/252.3

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWMC](#) | [Drawn D](#)

4. Document ID: US 6524841 B1

L6: Entry 4 of 4

File: USPT

Feb 25, 2003

US-PAT-NO: 6524841

DOCUMENT-IDENTIFIER: US 6524841 B1

TITLE: Recombinant megalomicin biosynthetic genes and uses thereof

DATE-ISSUED: February 25, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
McDaniel; Robert	Palo Alto	CA		
Volchegursky; Yanina	Emeryville	CA		

US-CL-CURRENT: 435/252.3; 435/252.35, 435/254.11, 435/320.1, 435/325, 435/419,  
536/23.1, 536/23.2, 536/23.7

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWMC](#) | [Drawn D](#)

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Terms	Documents
L5 and (MegK or MegCV or MegBIII or MegCIV)	4

**Display Format:**

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FILE 'HOME' ENTERED AT 15:33:39 ON 13 APR 2007

=> file medline, uspatful, dgene, embase, wpids, biosis  
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FULL ESTIMATED COST 2.10 2.10

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FILE 'USPATFULL' ENTERED AT 15:39:17 ON 13 APR 2007  
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=> s (MegL or MegK or MegF or MegBIII or MegCV)  
L1 548 (MEGL OR MEGK OR MEGF OR MEGBIII OR MEGCV)

=> s 11 and (gene cluster)  
3 FILES SEARCHED...

## L2 18 L1 AND (GENE CLUSTER)

=> S 12 AND (VECTOR)  
L3 14 L2 AND (VECTOR)

```
=> s 13 and (host cell)
      3 FILES SEARCHED...
L4          14 L3 AND (HOST CELL)
```

⇒ d 14 ti abs jibb tot

L4 ANSWER 1 OF 14 USPATFULL on STN  
TI Heterologous production of polyketides  
AB Recombinant *E. coli* host cells that comprise recombinant DNA expression vectors that drive expression of methylmalonyl CoA mutase from *Propionibacterium shermanii* or *Streptomyces cinnamomensis* as well as *Propionibacterium shermanii* epimerase can produce S-methylmalonyl CoA, a required substrate for the production of polyketides by most modular polyketide synthases and is not present in wild-type *E. coli* host cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2006:63029 USPATFULL

## **TITLE:** Heterologous production of polyketides

INVENTOR(S): Santi, Daniel, San Francisco, CA, UNITED STATES

Sancti, Daniel, San Francisco, CA, UNITED STATES  
Peck, Larry, San Carlos, CA, UNITED STATES

PECK, Barry, San Carlos, CA, UNITED STATES  
Davem, Linda, Belmont, CA, UNITED STATES

Bayem, Linda, Belmont, CA, UNITED STATES  
Kealey, James, San Rafael, CA, UNITED STATES  
PATENT ASSIGNEE(S): Kogar Biocare, Inc., Hayward, CA, UNITED STATES

## Connecting via Winsock to STN

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LOGINID: ssspta1653hxp

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(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7011959	B1	20060314
APPLICATION INFO.:	US 2000-699136		20001027 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-161703P	19991027 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Kerr, Kathleen	
LEGAL REPRESENTATIVE:	Ashley, Gary W.	
NUMBER OF CLAIMS:	19	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 9 Drawing Page(s)	
LINE COUNT:	3239	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 2 OF 14 USPATFULL on STN  
TI Gene cluster for fostriecin biosynthesis  
AB Domains of fostriecin polyketide synthase and modification enzymes and polynucleotides encoding them are provided. Methods to prepare fostriecin in pharmaceutically useful quantities are described, as are methods to prepare fostriecin analogs and other polyketides using the polynucleotides encoding fostriecin polyketide synthase domains or modifying enzymes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:171298 USPATFULL  
TITLE: Gene cluster for fostriecin biosynthesis  
INVENTOR(S): Reid, Ralph C., San Rafael, CA, UNITED STATES  
Hu, Zhihao, Castro Valley, CA, UNITED STATES  
Tang, Li, Foster City, CA, UNITED STATES  
PATENT ASSIGNEE(S): KOSAN BIOSCIENCES, INC., A Delaware corporation, Hayward, CA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005148045	A1	20050707
APPLICATION INFO.:	US 2004-922282	A1	20040818 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-496306P	20030818 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	9199	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 14 USPATFULL on STN  
TI Disorazole polyketide synthase encoding polynucleotides  
AB Domains of disorazole polyketide synthase and polynucleotides encoding them are provided. Methods to prepare disorazoles in pharmaceutically useful quantities are described, as are methods to prepare disorazole analogs and other polyketides using the polynucleotides encoding disorazole polyketide synthase domains or modifying enzymes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:37505 USPATFULL  
TITLE: Disorazole polyketide synthase encoding polynucleotides  
INVENTOR(S): Julien, Bryan, Oakland, CA, UNITED STATES  
PATENT ASSIGNEE(S): Reid, Ralph C., San Rafael, CA, UNITED STATES  
Kosan Biosciences, Inc., Hayward, CA, UNITED STATES,  
94545 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005032184	A1	20050210
APPLICATION INFO.:	US 2003-729802	A1	20031205 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-512892P	20031020 (60)
	US 2003-484934P	20030702 (60)
	US 2003-473311P	20030522 (60)
	US 2003-465038P	20030423 (60)
	US 2003-455521P	20030317 (60)
	US 2002-431272P	20021206 (60)

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834  
NUMBER OF CLAIMS: 20  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 7 Drawing Page(s)  
LINE COUNT: 4711  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 14 USPATFULL on STN

TI Recombinant genes for polyketide modifying enzymes  
AB Materials and methods to produce modified polyketides are disclosed. The biosynthesis, transfer and regulator genes for various sugars to effectuate polyketide modification are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:260518 USPATFULL  
TITLE: Recombinant genes for polyketide modifying enzymes  
INVENTOR(S): Hutchinson, C. Richard, San Mateo, CA, UNITED STATES  
Katz, Leonard, Oakland, CA, UNITED STATES  
Reid, Ralph, San Rafael, CA, UNITED STATES  
Hu, Zhihao, Castro Valley, CA, UNITED STATES  
Gramajo, Hugo, Berkeley, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004203015	A1	20041014
APPLICATION INFO.:	US 2003-611442	A1	20030630 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-393016P	20020628 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Ted Apple, (Townsend and Townsend and Crew), 379 Lytton Avenue, Palo Alto, CA, 94301	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	2721	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 5 OF 14 USPATFULL on STN  
TI Heterologous production of polyketides  
AB Recombinant host cells that comprise recombinant DNA expression vectors that drive expression of a product and a precursor for biosynthesis of that product can be used to produce useful products such as polyketides in host cells that do not naturally produce the product or produce the product or precursor at low levels due to the absence of the precursor or the presence of the precursor in rate limiting amounts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:239735 USPATFULL  
TITLE: Heterologous production of polyketides  
INVENTOR(S): Santi, Daniel, San Francisco, CA, UNITED STATES  
Dayem, Linda, San Anselmo, CA, UNITED STATES  
Kealey, James, San Anselmo, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004185541	A1	20040923
APPLICATION INFO.:	US 2004-829897	A1	20040421 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-942407, filed on 29 Aug 2001, PENDING Division of Ser. No. US 2000-699136, filed on 27 Oct 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-161703P	19991027 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MORRISON & FOERSTER LLP, 3811 VALLEY CENTRE DRIVE, SUITE 500, SAN DIEGO, CA, 92130-2332	
NUMBER OF CLAIMS:	3	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	3330	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 6 OF 14 USPATFULL on STN  
TI Recombinant chalcomycin polyketide synthase and modifying genes  
AB Domains of chalcomycin polyketide synthases and modification enzymes and polynucleotides encoding them are provided. Methods to prepare chalcomycin in pharmaceutically useful quantities are described, as are methods to prepare chalcomycin analogs and other polyketides using the polynucleotides encoding chalcomycin polyketide synthase domains or modifying enzymes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:171894 USPATFULL  
TITLE: Recombinant chalcomycin polyketide synthase and modifying genes  
INVENTOR(S): Katz, Leonard, Oakland, CA, UNITED STATES  
Reid, Ralph C., San Rafael, CA, UNITED STATES  
Hu, Zhihao, Castro Valley, CA, UNITED STATES  
Schirmer, Andreas, Hayward, CA, UNITED STATES  
Ward, Shannon L., Pleasanton, CA, UNITED STATES  
Reeves, Christopher, Orinda, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004132055	A1	20040708
APPLICATION INFO.:	US 2003-647196	A1	20030821 (10)

NUMBER	DATE
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PRIORITY INFORMATION: US 2002-420994P 20021024 (60)  
US 2003-493966P 20030808 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018

NUMBER OF CLAIMS: 30

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 2 Drawing Page(s)

LINE COUNT: 9387

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 7 OF 14 USPATFULL on STN

TI Recombinant polynucleotides encoding pro-geldanamycin producing polyketide synthase and accessory proteins, and uses thereof

AB The invention relates to recombinant polyketide synthase enzymes, polyketide modifying proteins, and other proteins involved in polyketide biosynthesis or function. The invention provides domains of geldanamycin and herbimycin polyketide synthases, polynucleotides that encode such enzymes, and to host cells in which such encoding polynucleotides can be advantageously expressed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:101196 USPATFULL

TITLE: Recombinant polynucleotides encoding pro-geldanamycin producing polyketide synthase and accessory proteins, and uses thereof

INVENTOR(S): Hutchinson, Richard C., San Mateo, CA, UNITED STATES  
Reid, Ralph C., San Rafael, CA, UNITED STATES  
Hu, Zhihao, Castro Valley, CA, UNITED STATES  
Rascher, Andreas, San Francisco, CA, UNITED STATES  
Schirmer, Andreas, Hayward, CA, UNITED STATES  
McDaniel, Robert, Palo Alto, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004077058	A1	20040422
	US 7189549	B2	20070313
APPLICATION INFO.:	US 2003-461194	A1	20030613 (10)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2002-212962, filed on 5 Aug 2002, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-389255P	20020614 (60)
	US 2002-393929P	20020703 (60)
	US 2002-395275P	20020712 (60)
	US 2002-415326P	20020930 (60)
	US 2002-420820P	20021024 (60)
	US 2002-433130P	20021213 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018	
NUMBER OF CLAIMS:	48	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	11 Drawing Page(s)	
LINE COUNT:	6799	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 8 OF 14 USPATFULL on STN

TI Heterologous production of polyketides

AB Recombinant host cells that comprise recombinant DNA expression vectors

that drive expression of a product and a precursor for biosynthesis of that product can be used to produce useful products such as polyketides in host cells that do not naturally produce the product or produce the product or precursor at low levels due to the absence of the precursor or the presence of the precursor in rate limiting amounts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:7438 USPATFULL

TITLE: Heterologous production of polyketides

INVENTOR(S): Santi, Daniel V., San Francisco, CA, UNITED STATES  
Khosla, Chaitan, Stanfrod, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004005672	A1	20040108
APPLICATION INFO.:	US 2003-371475	A1	20030221 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-358936P	20020222 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Kosan Biosciences, Inc., Intellectual Property Department, 3832 Bay Center Place, Hayward, CA, 94545	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	13 Drawing Page(s)	
LINE COUNT:	3491	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 9 OF 14 USPATFULL on STN

TI Production of polyketides

AB Recombinant host cells that comprise recombinant DNA expression vectors that drive expression of a product and a precursor for biosynthesis of that product can be used to produce useful products such as polyketides in host cells that do not naturally produce the product or produce the product at low levels due to the absence of the precursor or the presence of the precursor in rate limiting amounts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:335016 USPATFULL

TITLE: Production of polyketides

INVENTOR(S): Katz, Leonard, Oakland, CA, UNITED STATES  
Revill, Peter, Oakland, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003235892	A1	20031225
APPLICATION INFO.:	US 2003-607809	A1	20030627 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-697022, filed on 25 Oct 2000, GRANTED, Pat. No. US 6627427		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-161414P	19991025 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MORRISON & FOERSTER LLP, 3811 VALLEY CENTRE DRIVE, SUITE 500, SAN DIEGO, CA, 92130-2332	
NUMBER OF CLAIMS:	6	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	2751	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 10 OF 14 USPATFULL on STN  
TI Novel methods of diagnosis of metastatic colorectal cancer, compositions and methods of screening for modulators of metastatic colorectal cancer  
AB Described herein are methods and compositions that can be used for diagnosis and treatment of metastatic colorectal cancer. Also described herein are methods that can be used to identify modulators of metastatic colorectal cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:334944 USPATFULL  
TITLE: Novel methods of diagnosis of metastatic colorectal cancer, compositions and methods of screening for modulators of metastatic colorectal cancer  
INVENTOR(S): Mack, David H., Menlo Park, CA, UNITED STATES  
Markowitz, Sanford David, Pepper Pike, OH, UNITED STATES  
PATENT ASSIGNEE(S): Eos Biotechnology, Inc., South San Francisco, CA (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003235820	A1	20031225
APPLICATION INFO.:	US 2002-87080	A1	20020227 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-284555P	20010417 (60)
	US 2001-281149P	20010402 (60)
	US 2001-272206P	20010227 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1	
LINE COUNT:	22670	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 11 OF 14 USPATFULL on STN  
TI Heterologous production of 15-methyl-6-deoxyerthronolide B  
AB Recombinant host cells that comprise recombinant DNA expression vectors that drive expression of a product and a precursor for biosynthesis of that product can be used to produce useful products such as polyketides in host cells that do not naturally produce the product or produce the product at low levels due to the absence of the precursor or the presence of the precursor in rate limiting amounts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
ACCESSION NUMBER: 2003:260669 USPATFULL  
TITLE: Heterologous production of 15-methyl-6-deoxyerthronolide B  
INVENTOR(S): Katz, Leonard, Oakland, CA, United States  
Revill, Peter, Oakland, CA, United States  
PATENT ASSIGNEE(S): Kosan Biosciences, Inc., Hayward, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6627427	B1	20030930
APPLICATION INFO.:	US 2000-697022		20001025 (9)

NUMBER	DATE
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PRIORITY INFORMATION: US 1999-161414P 19991025 (60)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Achutamurthy, Ponnathapu  
ASSISTANT EXAMINER: Kerr, Kathleen  
LEGAL REPRESENTATIVE: Morrison & Foerster LLP, Kaster, Kevin  
NUMBER OF CLAIMS: 12  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 20 Drawing Figure(s); 20 Drawing Page(s)  
LINE COUNT: 3167  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 12 OF 14 USPATFULL on STN  
TI Recombinant megalomicin biosynthetic genes and uses thereof  
AB Recombinant nucleic acids that encode all or a portion of the megAI gene of the megalomicin polyketide synthase (PKS) of Micromonospora megalomicea are used to produce recombinant PKS enzymes in host cells to make megalomicin, megalomicin derivatives, and other polyketides that are useful as antibiotics, motilides, and antiparasitics.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:53694 USPATFULL  
TITLE: Recombinant megalomicin biosynthetic genes and uses thereof  
INVENTOR(S): McDaniel, Robert, Palo Alto, CA, United States  
Volchegursky, Yanina, Emeryville, CA, United States  
PATENT ASSIGNEE(S): Kosan Biosciences, Inc., Hayward, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6524841	B1	20030225
APPLICATION INFO.:	US 2000-679279		20001004 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-190024P	20000317 (60)
	US 1999-158305P	19991008 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Achutamurthy, Ponnathapu	
ASSISTANT EXAMINER:	Kerr, Kathy	
LEGAL REPRESENTATIVE:	Morrison & Foerster LLP	
NUMBER OF CLAIMS:	7	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	70 Drawing Figure(s); 70 Drawing Page(s)	
LINE COUNT:	6745	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 13 OF 14 USPATFULL on STN  
TI Isolated gene for methylmalonyl CoA epimerase and uses thereof  
AB Recombinant host cells that comprise recombinant DNA expression vectors that drive expression of a product and a precursor for biosynthesis of that product can be used to produce useful products such as polyketides in host cells that do not naturally produce the product or produce the product or precursor at low levels due to the absence of the precursor or the presence of the precursor in rate limiting amounts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:258831 USPATFULL  
TITLE: Isolated gene for methylmalonyl CoA epimerase and uses thereof  
INVENTOR(S): Santi, Daniel, San Francisco, CA, UNITED STATES  
Dayem, Linda, Belmont, CA, UNITED STATES

Kealey, James, San Rafael, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002142401	A1	20021003
APPLICATION INFO.:	US 2001-942407	A1	20010829 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-699136, filed on 27 Oct 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-161703P	19991027 (60)
	US 1999-161414P	19991025 (60)
	US 2000-206082P	20000518 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Carolyn A. Favorito, Morrison & Foerster LLP, Suite 500, 3811 Valley Centre Drive, San Diego, CA, 92130-2332	
NUMBER OF CLAIMS:	25	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	3389	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L4 ANSWER 14 OF 14 WPIDS COPYRIGHT 2007 THE THOMSON CORP on STN

TI Novel isolated, purified, or recombinant nucleic acid comprising polyketide modifying gene, where gene encodes polyketide modifying enzyme e.g., MegR, MegK, or MegM enzymes useful for producing modified polyketide  
AN 2004-203379 [19] WPIDS  
AB WO 2004003169 A2 UPAB: 20060121  
NOVELTY - An isolated, purified, or recombinant nucleic acid (I) comprising a polyketide modifying gene, where the gene encodes a polyketide modifying enzyme chosen from MegR, MegF, MegK, MegCIV, MegCV, MegBVI, MegBIII, MegL, and MegM enzymes, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an isolated, purified, or recombinant nucleic acid (II) comprising genes for the biosynthesis mycarose for attachment to a polyketide, the enzymes comprising the MegM, MegL, MegBIII, MegBIV, MegDIV, MegBII-2, and MegBVI enzymes;

(2) an isolated, purified, or recombinant nucleic acid (III) comprising genes for the biosynthesis mycarose for attachment of mecosamine of a polyketide, the enzymes comprising the MegM, MegL, MegCII, MegBVI, MegDIV, MegDV, MegDII, MegDIII, and MegDI enzymes;

(3) an isolated, purified, or recombinant nucleic acid (IV) comprising genes for the biosynthesis of desosamine to a polyketide, the enzymes consisting of the MegM, MegL, MegCII, MegCIV, MegCV, MegDII, and MegDIII enzymes;

(4) an expression vector (V) comprising (I);

(5) a host cell comprising (I);

(6) a host cell comprising (II) that expresses a polyketide modifying enzyme encoded by a gene from a mycarose biosynthetic gene set, where the enzyme is chosen from MegM, MegL, MegBIII, MegBIV, MegDIV, MegBII-2, and MegBVI, MegBV, and MegF;

(7) a host cell comprising (III) that expresses a polyketide modifying enzyme encoded by a gene from a mecosamine biosynthetic gene set, where the enzyme is chosen from MegM, MegL, MegCII, MegBVI, MegDIV, MegDV, MegDVI, MegDVII, MegDII, MegDIII, and MegDI; and

(8) a host cell comprising (IV) that expresses a polyketide modifying enzyme encoded by a gene from a desosamine biosynthetic gene set, where the enzyme is chosen from MegM, MegL, MegCII, MegCIV, MegCV, MegDII, and MegDIII, and MegCIII.

USE - (M1) is useful for producing a modified polyketide, which involves culturing a recombinant cell comprising (I) under conditions in which the cell expresses a product of a gene encoded by (I) under conditions in which the unmodified polyketide is present, and producing the modified polyketide. In (M1), the cell further comprises (I) one or more module of a polyketide synthase. The cell produces megosamine and can attach megosamine to a polyketide, where the cell, in its naturally occurring non-recombinant state cannot produce megosamine. (All claimed.)

DESCRIPTION OF DRAWINGS - The drawing shows a schematic of the megalomicin polyketide synthase (meg DEBS) and corresponding meg genes upstream and downstream of the meg DEBS region and cosmids overlapping this region.

ACCESSION NUMBER: 2004-203379 [19] WPIDS  
DOC. NO. CPI: C2004-080057 [19]  
TITLE: Novel isolated, purified, or recombinant nucleic acid comprising polyketide modifying gene, where gene encodes polyketide modifying enzyme e.g., MegR, MegK, or MegM enzymes useful for producing modified polyketide  
DERWENT CLASS: B03; B04; C02; D16  
INVENTOR: GRAMAJO H; HU Z; HUTCHINSON C R; HUTCHINSON R C; KATZ L; REID R  
PATENT ASSIGNEE: (GRAM-I) GRAMAJO H; (HUZZ-I) HU Z; (HUTC-I) HUTCHINSON C R; (KATZ-I) KATZ L; (KOSA-N) KOSAN BIOSCIENCES INC; (REID-I) REID R  
COUNTRY COUNT: 103

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2004003169	A2	20040108	(200419)*	EN	51[3]	
AU 2003258978	A1	20040119	(200447)	EN		
US 20040203015	A1	20041014	(200468)	EN		
AU 2003258978	A8	20051117	(200638)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004003169	A2	WO 2003-US20681	20030630
US 20040203015	A1 Provisional	US 2002-393016P	20020628
AU 2003258978	A1	AU 2003-258978	20030630
US 20040203015	A1	US 2003-611442	20030630
AU 2003258978	A8	AU 2003-258978	20030630

FILING DETAILS:

PATENT NO	KIND	PATENT NO	
AU 2003258978	A1	Based on	WO 2004003169 A
AU 2003258978	A8	Based on	WO 2004003169 A

PRIORITY APPLN. INFO: US 2002-393016P 20020628  
US 2003-611442 20030630

=> d his

FILE 'MEDLINE, USPATFULL, DGENE, EMBASE, WPIDS, BIOSIS' ENTERED AT  
15:39:17 ON 13 APR 2007

L1 548 S (MEGL OR MEGK OR MEGF OR MEGBIII OR MEGCV)  
L2 18 S L1 AND (GENE CLUSTER)  
L3 14 S L2 AND (VECTOR)  
L4 14 S L3 AND (HOST CELL)

=> s 11 and (DNA)  
L5 132 L1 AND (DNA)

=> s 15 and (modifying enzyme)  
L6 9 L5 AND (MODIFYING ENZYME)

=> d 16 ti abs ibib tot

L6 ANSWER 1 OF 9 USPATFULL on STN

TI Heterologous production of polyketides

AB Recombinant *E. coli* host cells that comprise recombinant DNA expression vectors that drive expression of methylmalonyl CoA mutase from *Propionibacterium shermanii* or *Streptomyces cinnamonensis* as well as *Propionibacterium shermanii* epimerase can produce S-methylmalonyl CoA, a required substrate for the production of polyketides by most modular polyketide synthases and is not present in wild-type *E. coli* host cells.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2006:63029 USPATFULL

TITLE: Heterologous production of polyketides

INVENTOR(S): Santi, Daniel, San Francisco, CA, UNITED STATES

Peck, Larry, San Carlos, CA, UNITED STATES

Dayem, Linda, Belmont, CA, UNITED STATES

Kealey, James, San Rafael, CA, UNITED STATES

PATENT ASSIGNEE(S): Kosan Biosciences, Inc., Hayward, CA, UNITED STATES  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 7011959	B1	20060314
APPLICATION INFO.:	US 2000-699136		20001027 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-161703P	19991027 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Kerr, Kathleen	
LEGAL REPRESENTATIVE:	Ashley, Gary W.	
NUMBER OF CLAIMS:	19	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 9 Drawing Page(s)	
LINE COUNT:	3239	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 2 OF 9 USPATFULL on STN

TI Gene cluster for fostriecin biosynthesis

AB Domains of fostriecin polyketide synthase and modification enzymes and polynucleotides encoding them are provided. Methods to prepare fostriecin in pharmaceutically useful quantities are described, as are methods to prepare fostriecin analogs and other polyketides using the polynucleotides encoding fostriecin polyketide synthase domains or modifying enzymes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2005:171298 USPATFULL

TITLE: Gene cluster for fostriecin biosynthesis  
INVENTOR(S): Reid, Ralph C., San Rafael, CA, UNITED STATES  
Hu, Zhihao, Castro Valley, CA, UNITED STATES  
Tang, Li, Foster City, CA, UNITED STATES  
PATENT ASSIGNEE(S): KOSAN BIOSCIENCES, INC., A Delaware corporation,  
Hayward, CA, UNITED STATES (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005148045	A1	20050707
APPLICATION INFO.:	US 2004-922282	A1	20040818 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-496306P	20030818 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834, US	
NUMBER OF CLAIMS:	21	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	9199	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L6 ANSWER 3 OF 9 USPATFULL on STN  
TI Disorazole polyketide synthase encoding polynucleotides  
AB Domains of disorazole polyketide synthase and polynucleotides encoding  
them are provided. Methods to prepare disorazoles in pharmaceutically  
useful quantities are described, as are methods to prepare disorazole  
analog and other polyketides using the polynucleotides encoding  
disorazole polyketide synthase domains or modifying enzymes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
ACCESSION NUMBER: 2005:37505 USPATFULL  
TITLE: Disorazole polyketide synthase encoding polynucleotides  
INVENTOR(S): Julien, Bryan, Oakland, CA, UNITED STATES  
Reid, Ralph C., San Rafael, CA, UNITED STATES  
PATENT ASSIGNEE(S): Kosan Biosciences, Inc., Hayward, CA, UNITED STATES,  
94545 (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005032184	A1	20050210
APPLICATION INFO.:	US 2003-729802	A1	20031205 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-512892P	20031020 (60)
	US 2003-484934P	20030702 (60)
	US 2003-473311P	20030522 (60)
	US 2003-465038P	20030423 (60)
	US 2003-455521P	20030317 (60)
	US 2002-431272P	20021206 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	7 Drawing Page(s)	
LINE COUNT:	4711	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L6 ANSWER 4 OF 9 USPATFULL on STN  
TI Recombinant genes for polyketide modifying enzymes  
AB Materials and methods to produce modified polyketides are disclosed. The biosynthesis, transfer and regulator genes for various sugars to effectuate polyketide modification are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:260518 USPATFULL  
TITLE: Recombinant genes for polyketide modifying enzymes  
INVENTOR(S): Hutchinson, C. Richard, San Mateo, CA, UNITED STATES  
Katz, Leonard, Oakland, CA, UNITED STATES  
Reid, Ralph, San Rafael, CA, UNITED STATES  
Hu, Zhihao, Castro Valley, CA, UNITED STATES  
Gramajo, Hugo, Berkeley, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004203015	A1	20041014
APPLICATION INFO.:	US 2003-611442	A1	20030630 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-393016P	20020628 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Ted Apple, (Townsend and Townsend and Crew), 379 Lytton Avenue, Palo Alto, CA, 94301	
NUMBER OF CLAIMS:	23	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	2721	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 5 OF 9 USPATFULL on STN  
TI Heterologous production of polyketides  
AB Recombinant host cells that comprise recombinant DNA expression vectors that drive expression of a product and a precursor for biosynthesis of that product can be used to produce useful products such as polyketides in host cells that do not naturally produce the product or produce the product or precursor at low levels due to the absence of the precursor or the presence of the precursor in rate limiting amounts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
ACCESSION NUMBER: 2004:239735 USPATFULL  
TITLE: Heterologous production of polyketides  
INVENTOR(S): Santi, Daniel, San Francisco, CA, UNITED STATES  
Dayem, Linda, San Anselmo, CA, UNITED STATES  
Kealey, James, San Anselmo, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004185541	A1	20040923
APPLICATION INFO.:	US 2004-829897	A1	20040421 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-942407, filed on 29 Aug 2001, PENDING Division of Ser. No. US 2000-699136, filed on 27 Oct 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-161703P	19991027 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MORRISON & FOERSTER LLP, 3811 VALLEY CENTRE DRIVE,	

SUITE 500, SAN DIEGO, CA, 92130-2332

NUMBER OF CLAIMS: 3  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 1 Drawing Page(s)  
LINE COUNT: 3330  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 6 OF 9 USPATFULL on STN

TI Recombinant chalcomycin polyketide synthase and modifying genes  
AB Domains of chalcomycin polyketide synthases and modification enzymes and polynucleotides encoding them are provided. Methods to prepare chalcomycin in pharmaceutically useful quantities are described, as are methods to prepare chalcomycin analogs and other polyketides using the polynucleotides encoding chalcomycin polyketide synthase domains or modifying enzymes.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:171894 USPATFULL  
TITLE: Recombinant chalcomycin polyketide synthase and modifying genes  
INVENTOR(S): Katz, Leonard, Oakland, CA, UNITED STATES  
Reid, Ralph C., San Rafael, CA, UNITED STATES  
Hu, Zhihao, Castro Valley, CA, UNITED STATES  
Schirmer, Andreas, Hayward, CA, UNITED STATES  
Ward, Shannon L., Pleasanton, CA, UNITED STATES  
Reeves, Christopher, Orinda, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004132055	A1	20040708
APPLICATION INFO.:	US 2003-647196	A1	20030821 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-420994P	20021024 (60)
	US 2003-493966P	20030808 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018	
NUMBER OF CLAIMS:	30	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	2 Drawing Page(s)	
LINE COUNT:	9387	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L6 ANSWER 7 OF 9 USPATFULL on STN

TI Heterologous production of polyketides  
AB Recombinant host cells that comprise recombinant DNA expression vectors that drive expression of a product and a precursor for biosynthesis of that product can be used to produce useful products such as polyketides in host cells that do not naturally produce the product or produce the product or precursor at low levels due to the absence of the precursor or the presence of the precursor in rate limiting amounts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:7438 USPATFULL  
TITLE: Heterologous production of polyketides  
INVENTOR(S): Santi, Daniel V., San Francisco, CA, UNITED STATES  
Khosla, Chaitan, Stanfrod, CA, UNITED STATES

	NUMBER	KIND	DATE

PATENT INFORMATION: US 2004005672 A1 20040108  
APPLICATION INFO.: US 2003-371475 A1 20030221 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-358936P	20020222 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Kosan Biosciences, Inc., Intellectual Property Department, 3832 Bay Center Place, Hayward, CA, 94545	
NUMBER OF CLAIMS:	20	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	13 Drawing Page(s)	
LINE COUNT:	3491	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 8 OF 9 USPATFULL on STN

TI Isolated gene for methylmalonyl CoA epimerase and uses thereof  
AB Recombinant host cells that comprise recombinant DNA  
expression vectors that drive expression of a product and a precursor  
for biosynthesis of that product can be used to produce useful products  
such as polyketides in host cells that do not naturally produce the  
product or produce the product or precursor at low levels due to the  
absence of the precursor or the presence of the precursor in rate  
limiting amounts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:258831 USPATFULL  
TITLE: Isolated gene for methylmalonyl CoA epimerase and uses  
thereof  
INVENTOR(S): Santi, Daniel, San Francisco, CA, UNITED STATES  
Dayem, Linda, Belmont, CA, UNITED STATES  
Kealey, James, San Rafael, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002142401	A1	20021003
APPLICATION INFO.:	US 2001-942407	A1	20010829 (9)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-699136, filed on 27 Oct 2000, PENDING		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-161703P	19991027 (60)
	US 1999-161414P	19991025 (60)
	US 2000-206082P	20000518 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	Carolyn A. Favorito, Morrison & Foerster LLP, Suite 500, 3811 Valley Centre Drive, San Diego, CA, 92130-2332	
NUMBER OF CLAIMS:	25	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	1 Drawing Page(s)	
LINE COUNT:	3389	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L6 ANSWER 9 OF 9 WPIDS COPYRIGHT 2007 THE THOMSON CORP on STN

TI Novel isolated, purified, or recombinant nucleic acid comprising  
polyketide modifying gene, there gene encodes polyketide modifying  
enzyme e.g., MegR, MegK, or MegM enzymes useful for  
producing modified polyketide  
AN 2004-203379 [19] WPIDS

AB WO 2004003169 A2 UPAB: 20060121

NOVELTY - An isolated, purified, or recombinant nucleic acid (I) comprising a polyketide modifying gene, where the gene encodes a polyketide modifying enzyme chosen from MegR, MegF, MegK, MegCIV, MegCV, MegBVI, MegBIII, MegL, and MegM enzymes, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an isolated, purified, or recombinant nucleic acid (II) comprising genes for the biosynthesis mycarose for attachment to a polyketide, the enzymes comprising the MegM, MegL, MegBIII, MegBIV, MegDIV, MegBII-2, and MegBVI enzymes;

(2) an isolated, purified, or recombinant nucleic acid (III) comprising genes for the biosynthesis mycarose for attachment of megalomycin of a polyketide, the enzymes comprising the MegM, MegL, MegCII, MegBVI, MegDIV, MegDVI, MegDII, MegDIII, and MegDI enzymes;

(3) an isolated, purified, or recombinant nucleic acid (IV) comprising genes for the biosynthesis of desosamine to a polyketide, the enzymes consisting of the MegM, MegL, MegCII, MegCIV, MegCV, MegDII, and MegDIII enzymes;

(4) an expression vector (V) comprising (I);

(5) a host cell comprising (I);

(6) a host cell comprising (II) that expresses a polyketide modifying enzyme encoded by a gene from a mycarose biosynthetic gene set, where the enzyme is chosen from MegM, MegL, MegBIII, MegBIV, MegDIV, MegBII-2, and MegBVI, MegBV, and MegF;

(7) a host cell comprising (III) that expresses a polyketide modifying enzyme encoded by a gene from a megalomycin biosynthetic gene set, where the enzyme is chosen from MegM, MegL, MegCII, MegBVI, MegDIV, MegDVI, MegDVII, MegDII, MegDIII, and MegDI; and

(8) a host cell comprising (IV) that expresses a polyketide modifying enzyme encoded by a gene from a desosamine biosynthetic gene set, where the enzyme is chosen from MegM, MegL, MegCII, MegCIV, MegCV, MegDII, and MegDIII, and MegCIII.

USE - (M1) is useful for producing a modified polyketide, which involves culturing a recombinant cell comprising (I) under conditions in which the cell expresses a product of a gene encoded by (I) under conditions in which the unmodified polyketide is present, and producing the modified polyketide. In (M1), the cell further comprises (I) one or more module of a polyketide synthase. The cell produces megalomycin and can attach megalomycin to a polyketide, where the cell, if it naturally occurring non-recombinant state cannot produce megalomycin. (All claimed.)

DESCRIPTION OF DRAWINGS - The drawing shows a schematic of the megalomycin polyketide synthase (meg DEBS) and corresponding meg genes upstream and downstream of the meg DEBS region and cosmids overlapping this region.

ACCESSION NUMBER: 2004-203379 [19] WPIDS

DOC. NO. CPI: C2004-080057 [19]

TITLE: Novel isolated, purified, or recombinant nucleic acid comprising polyketide modifying gene, where gene encodes polyketide modifying enzyme e.g., MegR, MegK, or MegM enzymes useful for producing modified polyketide

DERWENT CLASS: B03; B04; C02; D16

INVENTOR: GRAMAJO H; HU Z; HUTCHINSON C R; HUTCHINSON R C; KATZ L; REID R

PATENT ASSIGNEE: (GRAM-I) GRAMAJO H; (HUZ-Z-I) HU Z; (HUTC-I) HUTCHINSON C R; (KATZ-I) KATZ L; (KOSA-N) KOSAN BIOSCIENCES INC; (REID-I) REID R

COUNTRY COUNT: 103

PATENT INFO ABBR.:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 2004003169	A2	20040108	(200419)*	EN	51[3]	
AU 2003258978	A1	20040119	(200447)	EN		
US 20040203015	A1	20041014	(200468)	EN		
AU 2003258978	A8	20051117	(200638)	EN		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2004003169	A2	WO 2003-US20681	20030630
US 20040203015	A1 Provisional	US 2002-393016P	20020628
AU 2003258978	A1	AU 2003-258978	20030630
US 20040203015	A1	US 2003-611442	20030630
AU 2003258978	A8	AU 2003-258978	20030630

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2003258978	A1	Based on WO 2004003169 A
AU 2003258978	A8	Based on WO 2004003169 A

PRIORITY APPLN. INFO: US 2002-393016P 20020628  
 US 2003-611442 20030630